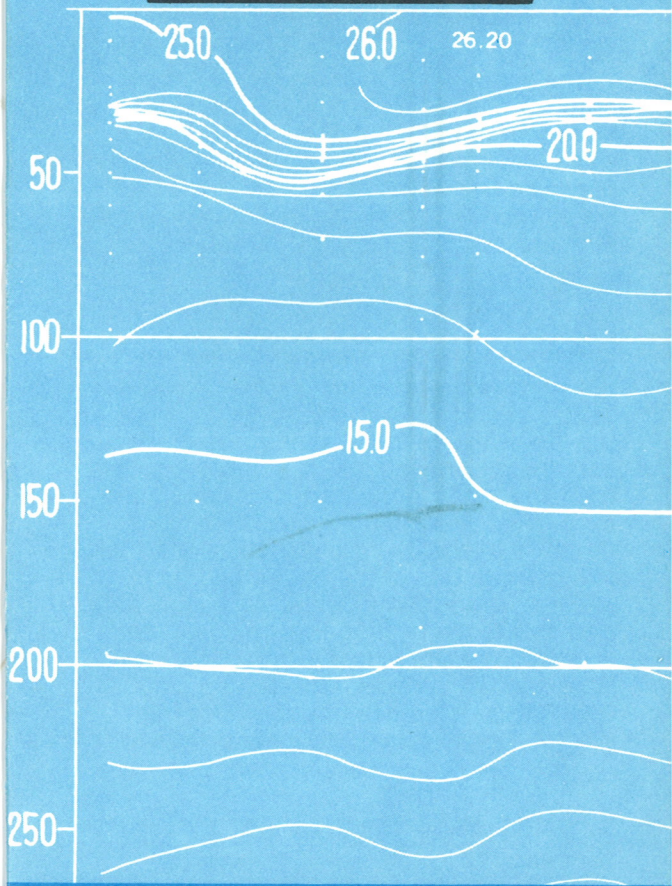
NODC

The National Oceanographic Data Center



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data and Information Service

THE environment is described a second, a minute, a day, a year, an epoch at a time, point by point; the portrait is always a composite one of individual observations—data.

NOAA, the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, and its Environmental Data and Information Service have the task of moving the Nation's mountain of environmental data, analyzing it, storing it, and distilling from it the important historical lessons taught by the physical world.

The world's largest collection of oceanographic data is held by the National Oceanographic Data Center (NODC), one of the Environmental Data and Information Service's five major facilities.* It is a national service facility for the United States and also administers World Data Center A, Oceanography, a part of the World Data Center system that provides for international data exchange.

NODC receives information for all oceans, seas, and estuaries from hundreds of sources, domestic and foreign, including the national data centers of other countries. For example, it is receiving data from the many projects being conducted as part of the International Decade of Ocean Exploration, a multination effort to improve the use of the ocean and its resources. World Data Center A collects data and publications from international cooperative expeditions, Declared National Programs of nations represented in UNESCO's Intergovernmental Oceanographic Commission, and other programs.

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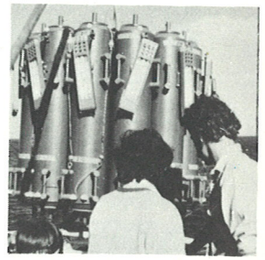
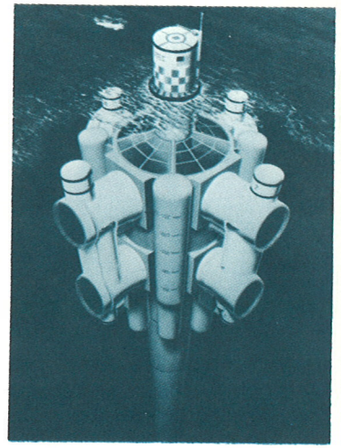
* Others are the National Geophysical and Solar-Terrestrial Data Center, Boulder, Colo.; the Center for Environmental Assessment Services, Washington, D.C.; the Environmental Science Information Center, Rockville, Md.; and the National Climatic Center, Asheville, N.C.





Most of these data are entered into the computerized data bases of the NODC, which performs all data processing for WDC-A, Oceanography.

Data and publications also are obtained by exchange between the Center and individuals and organizations in more than 50 countries, and such groups as the International Council for the Exploration of the Seas (ICES), and as gifts from scientists and organizations wishing to share their data.

NODC's conventional oceanographic data bases, which are oriented primarily toward the deep oceans, grow continually. For example, the oceanographic station data file, a major source of information about the physical and chemical properties of the oceans, now contains data from more than 620,000 stations.

Recently, however, attention shifted to the waters of the continental shelves. New marine environmental studies were established to guide the wise use of valuable marine resources. For example, investigators working under the auspices of the Outer Continental Shelf Environmental Assessment Program (OCSEAP) and similar programs are collecting dozens of different kinds of data, from trace metal and hydrocarbon concentrations to fish pathology and marine mammal sightings. In response, the NODC has created new multidisciplinary data files to ensure that these data can be archived and retrieved efficiently. Also, NODC is preparing an environmental data base for the Ocean Thermal Energy Conversion (OTEC) experiments for the Department of Energy. The Center is identifying areas requiring additional observations and providing data and data products to the DOE and its OTEC contractors.

Through the Environmental Data and Information Service's computerized information retrieval system, ENDEX (Environmental Data Index)/OASIS (Oceanic and Atmospheric Scientific Information System), NODC also can refer users to other marine data collections in the United States and to the published marine science literature.

Oceanographic Data Available From NODC

- Mechanical and expendable bathythermograph data in analog and digital form.
- Oceanographic station data for surface and serial depths, giving values of temperature, salinity, oxygen, inorganic phosphate, total phosphorus, nitrite-nitrogen, nitrate-nitrogen, silicate-silicon, and pH.
- Continuously recorded salinity-temperature-depth data in digital form.
- Surface current information obtained by using drift bottles or calculated from ship set and drift.
- Biological data, giving values of plankton standing crop, chlorophyll concentrations, and rates of primary productivity.
- Other marine environmental data obtained by diverse techniques, e.g., instrumented buoy data, and current meter data.

NODC Services

- Data processing.
- Data reproduction, including computer printouts, punched cards, magnetic tapes, and other forms.
- Preparation and analysis of statistical summaries based on archive holdings.
- Evaluation of various data records for user's specific requirements.
- Onsite liaison services available from representatives located at Anchorage, Alaska; La Jolla, Calif.; Miami, Fla.; Woods Hole, Mass.; and Seattle, Wash.
- Referral to organizations holding requested information.
- Online search of bibliographic data bases.
- Provision of general marine sciences information.
- Supply of publications, including data processing manuals, catalogs of holdings, data reports, and atlases.

Requests for Services

Requests should define data desired, geographic limits involved, and such other pertinent information as a description of the problem for which the data are required. They should also specify format—magnetic tape, punched cards, microfilm, or hard copy (computer printouts, publications, analog charts).

Cost varies with amount of material, special analysis, computer time, and other factors. Requests for small amounts of information are completed free of charge; otherwise, a cost estimate is presented to the requester before work begins, and the request is handled upon receipt of funds.

The *User's Guide to NODC's Data Services* and *NODC Applications Products,* available from NODC on request, provide detailed information concerning data holdings and data products.

Visitors are welcome at the National Oceanographic Data Center, located at 2001 Wisconsin Ave., N.W., Washington, D.C. However, advance notice is recommended if visitors wish to interview staff members. Special working space and technical assistance are provided on request. Call (202) 634-7500 or write:

The National Oceanographic Data Center
National Oceanic and Atmospheric Administration
2001 Wisconsin Ave., N.W.
Washington, D.C. 20235

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